

AMENDMENTS TO THE SPECIFICATION

Please replace paragraphs [0087] and [0089] with the following amended paragraphs:

[0087] In another embodiment, several siRNA library cloning vectors were designed so that the siRNA expression cassette may be controlled by an RNA-polymerase III promoter under the regulation of small molecules like tetracycline. Figure [[10]] 11 is a schematic representation of constructs with repression (A) and activation (B) of siRNA expression. (A) In the absence of tetracycline, the dimerized tetracycline repressor (Tet R) binds to the tetracycline operator sequence (tet O) located between the proximal sequence element (PSE) and the TATA box (TATA). This complex interferes with the formation of the transcription initiation complex, which consists of the siRNA activating protein complex (SNAPc), the transcription factor IIIB (TFIIIB) and RNA polymerase III (Pol III). (B) In the presence of tetracycline, the binding of Tet R to tet O is inhibited and, consequently, the transcription initiation complex can position itself properly.

[0089] A protocol for the construction of high complexity siRNA libraries in single promoter and double promoter pLSLP vectors was developed, as was a test for the stability of these siRNA libraries by hybridization with the Affymetrix Human Genome Focus Array (Affymetrix Cat. N 900377). The Affymetrix Human Genome Focus Array comprises about 90,000 (25-nucleotide long) oligonucleotide probes for 8,500 unique human transcripts (using about 11 probes/sequence) derived from RefSeq database. Based on genes present in the human Genome Focus Array, 1,500 genes related to cancer were selected for siRNA library construction. Five siRNA template oligos (27-mers) were designed for each of these genes based on selection parameters that have been developed for choosing efficient siRNAs. The 7,500 oligos (5 x 1,500 genes) were synthesized on the surface of glass slides (custom 7.8K "Xeotron" chips) for each single and double promoter vector comprising the sequences of the array probe oligos flanked by conservative sequences with restriction sites at both the 5'- and 3'-ends (Fig. [[13]] 12).